

## **IN THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

### **Listing of Claims**

1. (Currently Amended) A program guide information providing device ~~adapted to communicate~~ that communicates with a communication terminal device; said program guide information providing device comprising:

program guide information storing means for storing program guide information indicating contents of programs to be supplied by predetermined program supplying means;

preference information storing means for storing preference information indicating preferences of each of one or more users,

wherein the preference information comprises information linking:

each of the one or more users;

a corresponding personal remote terminal device having a user operable input selector; and

program information preferred by each of the users,

wherein the personal remote terminal device is a cellular telephone ~~adapted to communicate~~ communicates with the program guide information providing device via one of a plurality of communication terminal devices as a function of a cell area that the personal remote terminal device is located in, and ~~is adapted for generating~~ generates a user registration screen as a function of pre-registered preference information, ~~guiding~~ guides the one or more users to sequentially input program preference information, ~~receiving~~ receives the program information

preferred by the associated user, ~~correlating~~ correlates the program preference information with an associated cellular telephone number, ~~displaying~~ displays the program information, ~~selecting~~ selects a program from the program guide information in response to user operation of said input selector, and ~~displaying~~ displays audio and visual data of the selected program,

wherein the personal remote terminal device can be used at any of a plurality of program guide information providing devices, and

wherein the personal remote terminal device can be operated at a remote location from any of the plurality of program information providing devices,

wherein the preference information is stored in a manner correlated with a telephone number of the personal remote terminal device of each of the one or more users;

a receiver for receiving identification information from said communication terminal device indicative of the identification thereof,

wherein the receiver is positioned in a predetermined position in the home allowing an information exchange with the communication terminal device via infrared and an information exchange with each of the plurality of personal remote terminal devices,

wherein, when the personal remote terminal device is unable to communicate with the program guide information providing device, the personal remote terminal device communicates with a second personal remote terminal device which is able to communicate with the program guide information providing device and relay the information between the program guide information providing device and the personal remote terminal device;

searching means for:

reading from said preference information storing means said preference information corresponding to said identification information transmitted from said communication terminal device,

searching programs matching the preferences of said user from said program guide information based on said read preference information, and

generating searched program guide information comprising said searched programs; and

transmitting means for transmitting said searched program guide information to said communication terminal device;

wherein a program selection apparatus receives program selection information upon selection of one of said programs listed in said program guide information, said list of programs in said program guide is previously created and stored by said user and said previously created and stored list of programs in said program guide is remotely accessed by said user upon request on said communication terminal device.

2. (Previously Presented) The program guide information providing device according to Claim 1, further comprising receiving means for receiving programs supplied from said program supplying means.

3. (Currently Amended) A program guide information providing system comprising a communication terminal device and a program guide information providing device adapted to communicate with each other;

wherein said program guide information providing device comprises:

program guide information storing means for storing program guide information indicating the contents of programs to be supplied by predetermined program supplying means;

preference information storing means for storing preference information indicating the preferences of each of one or more users,

wherein the preference information comprises information linking:

each of the one or more users;

a corresponding personal remote terminal device having a user operable input selector; and

program information preferred by each of the users,

wherein the personal remote terminal device is a cellular telephone ~~adapted to communicate~~communicates with the program guide information providing device via one of a plurality of communication terminal devices as a function of a cell area that the personal remote terminal device is located in, and ~~is adapted for generating~~generates a user registration screen as a function of pre-registered preference information, ~~guiding~~guides the one or more users to sequentially input program preference information, ~~receiving~~receives the program information preferred by the associated user, ~~correlating~~correlates the program preference information with an associated cellular telephone number, ~~displaying~~displays the program information, ~~selecting~~selects a program from the program guide information in response to user operation of said input selector, and ~~displaying~~displays audio and visual data of the selected program,

wherein the personal remote terminal device can be used at any of a plurality of program guide information providing devices, and

wherein the personal remote terminal device can be operated at a remote location from any of the plurality of program information providing devices,

wherein the preference information is stored in a manner correlated with a telephone number of the personal remote terminal device of each of the one or more users;

a receiver for receiving identification information from said communication terminal device indicative of the identification thereof,

wherein the receiver is positioned in a predetermined position in the home allowing an information exchange with the communication terminal device via infrared and an information exchange with each of the plurality of personal remote terminal devices,

wherein, when the personal remote terminal device is unable to communicate with the program guide information providing device, the personal remote terminal device communicates with a second personal remote terminal device which is able to communicate with the program guide information providing device and relay the information between the program guide information providing device and the personal remote terminal device;

searching means for:

reading from said preference information storing means said preference information corresponding to said received identification information,

searching programs matching the preferences of said user from said program guide information based on said read preference information, and

generating searched program guide information comprising said searched programs; and

transmitting means for transmitting said searched program guide information to said communication terminal device;

and wherein said communication terminal device comprises:

transmitting means for transmitting to said guide information providing device said identification information associated with said communication terminal device;

receiving means for receiving said searched program guide information transmitted from said program guide information providing device;

notifying means for notifying the user of said received searched program guide information; and

transmitting means for transmitting to a program selection apparatus program selection information upon selection of one of said program lists in said program guide information, said list of programs in said program guide is previously created and stored by said user and said previously created and stored list of programs in said program guide is remotely accessed by said user upon request on said communication terminal device.

4. (Previously Presented) The program guide information providing system according to Claim 3, said program guide information providing device further comprising receiving means for receiving programs supplied from said program supplying means.

5. (Currently Amended) An information receiving device ~~adapted to communicate~~for communicating with a communication terminal device, said information receiving device comprising:

program guide information storing means for storing program guide information indicating the contents of programs to be supplied by predetermined program supplying means;

preference information storing means for storing preference information indicating the preferences of each of one or more users,

wherein the preference information comprises information linking:

each of the one or more users;

a corresponding personal remote terminal device having a user operable input selector; and

program information preferred by each of the users,

wherein the personal remote terminal device is a cellular telephone adapted to ~~communicate~~communicates with the information receiving device via one of a plurality of communication terminal devices as a function of a cell area that the personal remote terminal device is located in, and ~~is adapted for generating~~generates a user registration screen as a function of pre-registered preference information, guiding the one or more users to sequentially input program preference information, ~~receiving~~receives the program information preferred by the associated user, ~~correlating~~correlates the program preference information with an associated cellular telephone number, ~~displaying~~displays the program information, ~~selecting~~selects a program from the program guide information in response to user operation of said input selector, and ~~displaying~~displays audio and visual data of the selected program,

wherein the personal remote terminal device can be used at any of a plurality of program guide information providing devices, and

wherein the personal remote terminal device can be operated at a remote location from any of the plurality of program information providing devices,

wherein the preference information is stored in a manner correlated with a telephone number of the personal remote terminal device of each of the one or more users;

a receiver for receiving identification information from said communication terminal device indicative of the identification thereof,

wherein the receiver is positioned in a predetermined position in the home allowing an information exchange with the communication terminal device via infrared and an information exchange with each of the plurality of personal remote terminal devices,

wherein, when the personal remote terminal device is unable to communicate with the program guide information providing device, the personal remote terminal device communicates with a second personal remote terminal device which is able to communicate with the program guide information providing device and relay the information between the program guide information providing device and the personal remote terminal device;

searching means for:

reading from said preference information storing means said preference information corresponding to said received identification information,

searching programs matching the preferences of said user from said program guide information based on said read preference information, and

generating searched program guide information comprising said searched programs;

transmitting means for transmitting said searched program guide information to a remote commander; and

said remote commander having first transmitting / receiving means for directly exchanging information between said receiving means and said transmitting means, and second transmitting / receiving means for exchanging information via said communication terminal device and said communicating means;



wherein a program selection apparatus receives program selection information upon selection of one of said programs listed in said program guide information, said list of programs in said program guide is previously created and stored by said user and said previously created and stored list of programs in said program guide is remotely accessed by said user upon request on said communication terminal device.

6. (Previously Presented) The information receiving device according to Claim 5, further comprising recording control means for recording to recording means programs specified by said communication terminal device from a plurality of programs supplied from said program supplying means.

7. (Currently Amended) A remote operating system wherein a communication terminal device and an information receiving device are ~~adapted to communicate~~for communicating with each other;

wherein said information receiving device comprises:

program guide information storing means for storing program guide information indicating the contents of programs to be supplied by predetermined program supplying means;

preference information storing means for storing preference information indicating the preferences of each of one or more users,

wherein the preference information comprises information linking:

each of the one or more users;

a corresponding personal remote terminal device having a user operable input selector; and

program information preferred by each of the users,

wherein the personal remote terminal device is a cellular telephone ~~adapted to communicate~~communicates with the information receiving device via one of a plurality of communication terminal devices as a function of a cell area that the personal remote terminal device is located in, and ~~is adapted for generating~~generates a user registration screen as a function of pre-registered preference information, ~~guiding~~guides the one or more users to sequentially input program preference information, ~~receiving~~receives the program information preferred by the associated user, ~~correlating~~correlates the program preference information with an associated cellular telephone number, ~~displaying~~displays the program information, ~~selecting~~selects a program from the program guide information in response to user operation of said input selector, and ~~displaying~~displays audio and visual data of the selected program,

wherein the personal remote terminal device can be used at any of a plurality of program guide information providing devices, and

wherein the personal remote terminal device can be operated at a remote location from any of the plurality of program information providing devices,

wherein the preference information is stored in a manner correlated with a telephone number of the personal remote terminal device of each of the one or more users;

a receiver for receiving identification information from said communication terminal device indicative of the identification thereof,

wherein the receiver is positioned in a predetermined position in the home allowing an information exchange with the communication terminal device via infrared and an information exchange with each of the plurality of personal remote terminal devices,

wherein, when the personal remote terminal device is unable to communicate with the program guide information providing device, the personal remote terminal device communicates with a second personal remote terminal device which is able to communicate with the program guide information providing device and relay the information between the program guide information providing device and the personal remote terminal device;

searching means for:

reading from said preference information storing means said preference information corresponding to said received identification information,

searching programs matching the preferences of said user from said program guide information based on said read preference information, and

generating searched program guide information comprising said searched programs;

transmitting means for transmitting said searched program guide information to a remote commander; and

said remote commander having first transmitting / receiving means for directly exchanging information between said receiving means and said transmitting means, and second transmitting / receiving means for exchanging information via said communication terminal device and said communicating means;

and wherein said communication terminal device comprises:

transmitting means for transmitting to said remote commander said identification information associated with said communication terminal device;

receiving means for receiving said searched program guide information transmitted from said remote commander;

notifying means for notifying the user of said received searched program guide information; and

transmitting means for transmitting to a program selection apparatus program selection information upon selection of one of said program lists in said program guide information, said list of programs in said program guide is previously created and stored by said user and said previously created and stored list of programs in said program guide is remotely accessed by said user upon request on said communication terminal device.

8. (Previously Presented) The remote operating system according to Claim 7, wherein said information receiving device further comprises recording control means for recording to recording means programs specified by said communication terminal device from a plurality of programs supplied from said program supplying means.

9. (Currently Amended) A program guide information providing method for a program guide information providing device ~~adapted to communicate~~ for communicating with a communication terminal device, said method comprising the following steps:

storing in program guide information storing means program guide information indicating the contents of programs to be supplied by predetermined program supplying means;

storing preference information indicating the preferences of each of one or more users,

wherein the preference information comprises information linking:

each of the one or more users;

a corresponding personal remote terminal device having a user operable input selector; and

program information preferred by each of the users,

wherein the personal remote terminal device is a cellular telephone ~~adapted to communicate~~communicates with the program guide information providing device via one of a plurality of communication terminal devices as a function of a cell area that the personal remote terminal device is located in, and ~~is adapted for generating~~ generates a user registration screen as a function of pre-registered preference information, ~~guiding~~guides the one or more users to sequentially input program preference information, ~~receiving~~receives the program information preferred by the associated user, ~~correlating~~correlates the program preference information with an associated cellular telephone number, ~~displaying~~displays the program information, ~~selecting~~selects a program from the program guide information in response to user operation of said input selector, and ~~displaying~~displays audio and visual data of the selected program,

wherein the personal remote terminal device can be used at any of a plurality of program guide information providing devices, and

wherein the personal remote terminal device can be operated at a remote location from any of the plurality of program information providing devices,

wherein the preference information is stored in a manner correlated with a telephone number of the personal remote terminal device of each of the one or more users;

receiving identification information from said communication terminal device  
indicative of the identification thereof,

wherein the receiving step is in a predetermined position in the home allowing an  
information exchange with the communication terminal device via infrared and an information  
exchange with each of the plurality of personal remote terminal devices,

wherein, when the personal remote terminal device is unable to communicate with  
the program guide information providing device, the personal remote terminal device  
communicates with a second personal remote terminal device which is able to communicate with  
the program guide information providing device and relay the information between the program  
guide information providing device and the personal remote terminal device;

reading from said preference information storing means said preference  
information corresponding to said identification information transmitted from said  
communication terminal device;

searching programs matching the preferences of said user from said program  
guide information based on said read preference information;

generating searched program guide information comprising said searched  
programs; and

transmitting said searched program guide information to said communication  
terminal device;

wherein a program selection apparatus receives program selection information  
upon selection of one of said programs listed in said program guide information, said list of  
programs in said program guide is previously created and stored by said user and said previously

created and stored list of programs in said program guide is remotely accessed by said user upon request on said communication terminal device.

10. (Previously Presented) The program guide information providing method for a program guide information providing device according to Claim 9, further receiving programs supplied from said program supplying means.

11. (Currently Amended) A program guide information providing method for a program guide information providing system comprising a communication terminal device and a program guide information providing device ~~adapted to communicate~~for communicating with each other, said method comprising the following steps:

storing in program guide information storing means of said program guide information providing device, program guide information indicating the contents of programs to be supplied by predetermined program supplying means;

storing preference information indicating the preferences of each of one or more users,

wherein the preference information comprises information linking:

each of the one or more users;

a corresponding personal remote terminal device having a user operable input selector; and

program information preferred by each of the users,

wherein the personal remote terminal device is a cellular telephone ~~adapted to communicate~~communicates with the program guide information providing device via one of a

plurality of communication terminal devices as a function of a cell area that the personal remote terminal device is located in, and ~~is adapted for generating~~generates a user registration screen as a function of pre-registered preference information, ~~guiding~~guides the one or more users to sequentially input program preference information, ~~receiving~~receives the program information preferred by the associated user, ~~correlating~~correlates the program preference information with an associated cellular telephone number, ~~displaying~~displays the program information, ~~selecting~~selects a program from the program guide information in response to user operation of said input selector, and ~~displaying~~displays audio and visual data of the selected program,

wherein the personal remote terminal device can be used at any of a plurality of program guide information providing devices, and

wherein the personal remote terminal device can be operated at a remote location from any of the plurality of program information providing devices,

storing the preference information in a manner correlated with a telephone number of the personal remote terminal device of each of the one or more users;

receiving identification information from said communication terminal device indicative of the identification thereof,

wherein the receiving step is in a predetermined position in the home allowing an information exchange with the communication terminal device via infrared and an information exchange with each of the plurality of personal remote terminal devices,

wherein, when the personal remote terminal device is unable to communicate with the program guide information providing device, the personal remote terminal device communicates with a second personal remote terminal device which is able to communicate with



the program guide information providing device and relay the information between the program guide information providing device and the personal remote terminal device;

transmitting said identification information from said communication terminal device to said program guide information providing device;

reading from said preference information storing means said preference information corresponding to said received identification information,

searching programs matching the preferences of said user from said program guide information based on said read preference information, and

generating searched program guide information comprising said searched programs;

transmitting said searched program guide information to said communication terminal device from said guide information providing device;

receiving said searched program guide information transmitted from said program guide information providing device with said communication terminal device;

notifying the user of said received searched program guide information via notifying means; and

transmitting to a program selection apparatus program selection information upon selection of one of said program lists in said program guide information, said list of programs in said program guide is previously created and stored by said user and said previously created and stored list of programs in said program guide is remotely accessed by said user upon request on said communication terminal device.

12. (Previously Presented) The program guide information providing method for a program guide information providing system according to Claim 11, wherein said information providing device receives programs supplied from said program supplying means.

13. (Currently Amended) A program guide information providing method for an information receiving device adapted to ~~communicate~~for communicating with a communication terminal device, said method comprising the following steps:

storing program guide information indicating the contents of programs to be supplied by predetermined program supplying means to program guide information storing means of said information receiving device;

storing preference information indicating the preferences of each of one or more users,

wherein the preference information comprises information linking:

each of the one or more users;

a corresponding personal remote terminal device having a user operable input selector; and

program information preferred by each of the users,

wherein the personal remote terminal device is a cellular telephone adapted to ~~communicate~~communicates with the information receiving device via one of a plurality of communication terminal devices as a function of a cell area that the personal remote terminal device is located in, and is adapted to ~~generating~~generates a user registration screen as a function of pre-registered preference information, ~~guiding~~guides the one or more users to sequentially input program preference information, ~~receiving~~receives the program information

preferred by the associated user, ~~correlating~~ correlates the program preference information with an associated cellular telephone number, ~~displaying~~ displays the program information, ~~selecting~~ selects a program from the program guide information in response to user operation of said input selector, and ~~displaying~~ displays audio and visual data of the selected program,

wherein the personal remote terminal device can be used at any of a plurality of program guide information providing devices, and

wherein the personal remote terminal device can be operated at a remote location from any of the plurality of program information providing devices,

storing the preference information in a manner correlated with a telephone number of the personal remote terminal device of each of the one or more users;

receiving identification information from said communication terminal device indicative of the identification thereof,

wherein the receiving step is in a predetermined position in the home allowing an information exchange with the communication terminal device via infrared and an information exchange with each of the plurality of personal remote terminal devices,

wherein, when the personal remote terminal device is unable to communicate with the program guide information providing device, the personal remote terminal device communicates with a second personal remote terminal device which is able to communicate with the program guide information providing device and relay the information between the program guide information providing device and the personal remote terminal device;

transmitting said received identification information from a remote commander to said information receiving device;

receiving said identification information transmitted from said remote commander with said information receiving device;

reading from said preference information storing means said preference information corresponding to said received identification information;

searching programs matching the preferences of said user from said program guide information based on said read preference information;

generating searched program guide information comprising said searched programs;

transmitting said searched program guide information from said information receiving device to said remote commander;

receiving said searched program guide information transmitted from said information receiving device with said remote commander; and

transmitting said received searched program guide information from said remote commander to said communication terminal device;

wherein a program selection apparatus receives program selection information upon selection of one of said programs listed in said program guide information, said list of programs in said program guide is previously created and stored by said user and said previously created and stored list of programs in said program guide is remotely accessed by said user upon request on said communication terminal device.

14. (Previously Presented) The program guide information providing method for an information receiving device according to Claim 13, wherein said information receiving

device records to recording means programs specified by said communication terminal device from a plurality of programs supplied from said program supplying means.

15. (Currently Amended) A remote operating method for a remote operating system wherein a communication terminal device and an information receiving device are ~~adapted to communicate~~for communicating with each other, said method comprising the following steps:

storing program guide information indicating the contents of programs to be supplied by predetermined program supplying means to program guide information storing means of said information receiving device;

storing preference information indicating the preferences of each of one or more users,

wherein the preference information comprises information linking:

each of the one or more users;

a corresponding personal remote terminal device having a user operable input selector; and

program information preferred by each of the users,

wherein the personal remote terminal device is a cellular telephone ~~adapted to communicate~~communicates with the information receiving device via one of a plurality of communication terminal devices as a function of a cell area that the personal remote terminal device is located in, and is ~~adapted for generating~~generates a user registration screen as a function of pre-registered preference information, ~~guiding~~guides the one or more users to sequentially input program preference information, ~~receiving~~receives the program information

preferred by the associated user, ~~correlating~~ correlates the program preference information with an associated cellular telephone number, ~~displaying~~ displays the program information, ~~selecting~~ selects a program from the program guide information in response to user operation of said input selector, and ~~displaying~~ displays audio and visual data of the selected program,

wherein the personal remote terminal device can be used at any of a plurality of program guide information providing devices, and

wherein the personal remote terminal device can be operated at a remote location from any of the plurality of program information providing devices,

storing the preference information in a manner correlated with a telephone number of the personal remote terminal device of each of the one or more users;

receiving identification information from said communication terminal device indicative of the identification thereof,

wherein the receiving step is in a predetermined position in the home allowing an information exchange with the communication terminal device via infrared and an information exchange with each of the plurality of personal remote terminal devices,

wherein, when the personal remote terminal device is unable to communicate with the program guide information providing device, the personal remote terminal device communicates with a second personal remote terminal device which is able to communicate with the program guide information providing device and relay the information between the program guide information providing device and the personal remote terminal device;

transmitting said identification information from said communication terminal device to a remote commander connected to said communication means;

transmitting said received identification information from said remote commander to said information receiving device;

receiving said identification information transmitted from said remote commander with said information receiving device;

reading from said preference information storing means said preference information corresponding to said received identification information;

searching programs matching the preferences of said user from said program guide information based on said read preference information;

generating searched program guide information comprising said searched programs;

transmitting said searched program guide information from said information receiving device to said remote commander;

receiving said searched program guide information transmitted from said information receiving device with said remote commander;

transmitting said received searched program guide information from said remote commander to said communication terminal device;

receiving said searched program guide information transmitted from said remote commander with said communication terminal device;

notifying the user of said received searched program guide information via notifying means; and

transmitting to a program selection apparatus program selection information upon selection of one of said program lists in said program guide information, said list of programs in said program guide is previously created and stored by said user and said previously created and

stored list of programs in said program guide is remotely accessed by said user upon request on said communication terminal device.

16. (Previously Presented) The remote operating method for a remote operating system according to Claim 15, wherein said information receiving device further records to recording means programs specified by said communication terminal device from a plurality of programs supplied from said program supplying means.

17. (Previously Presented) The program guide information providing device according to Claim 1, wherein said preference information storing means is located adjacent said program selection apparatus.

18. (Previously Presented) The program guide information providing device according to Claim 1, wherein said preference information is located at a remote location apart from said program selection apparatus.

19. (Previously Presented) The program guide information providing device according to Claim 18, wherein said preference information is retrieved over a public network.

20. (Previously Presented) The program guide information providing device according to Claim 18, wherein said preference information is stored at a website.



21. (Previously Presented) The program guide information providing system according to Claim 3, wherein said preference information storing means is located adjacent said program selection apparatus.

22. (Previously Presented) The program guide information providing system according to Claim 3, wherein said preference information is located at a remote location apart from said program selection apparatus.

23. (Previously Presented) The program guide information providing system according to Claim 22, wherein said preference information is retrieved over a public network.

24. (Previously Presented) The program guide information providing system according to Claim 22, wherein said preference information is stored at a website.

25. (Previously Presented) The information receiving device according to Claim 5, wherein said preference information storing means is located adjacent said program selection apparatus.

26. (Previously Presented) The information receiving device according to Claim 5, wherein said preference information is located at a remote location apart from said program selection apparatus.

27. (Previously Presented) The information receiving device according to Claim 26, wherein said preference information is retrieved over a public network.

28. (Previously Presented) The information receiving device according to Claim 26, wherein said preference information is stored at a website.

29. (Previously Presented) The remote operating system according to Claim 7, wherein said preference information storing means is located adjacent said program selection apparatus.

30. (Previously Presented) The remote operating system according to Claim 7, wherein said preference information is located at a remote location apart from said program selection apparatus.

31. (Previously Presented) The remote operating system according to Claim 30, wherein said preference information is retrieved over a public network.

32. (Previously Presented) The remote operating system according to Claim 30, wherein said preference information is stored at a website.

33. (Previously Presented) The program guide information providing method according to Claim 9, wherein said preference information storing means is located adjacent said program selection apparatus.

34. (Previously Presented) The program guide information providing method according to Claim 9, wherein said preference information is located at a remote location apart from said program selection apparatus.

35. (Previously Presented) The program guide information providing method according to Claim 34, wherein said preference information is retrieved over a public network.

36. (Previously Presented) The program guide information providing method according to Claim 34, wherein said preference information is stored at a website.

37. (Previously Presented) The program guide information providing method according to Claim 11, wherein said preference information storing means is located adjacent said program selection apparatus.

38. (Previously Presented) The program guide information providing method according to Claim 11, wherein said preference information is located at a remote location apart from said program selection apparatus.

39. (Previously Presented) The program guide information providing method according to Claim 38, wherein said preference information is retrieved over a public network.

40. (Previously Presented) The program guide information providing method according to Claim 38, wherein said preference information is stored at a website.